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Application Numb r	10/078,474		
Filing Date	February 21, 2002		
First Named Inventor	Hoki Kwon		
Group Art Unit	2881		
Examiner Name	t.b.d.		
Attorney Docket Number	V637 02769 US		

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Initiats* No.1 (book, magazine, jo		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	,
		International Search Report, dated 08-08-2003, relative to PCT application No. PCT/US 03/05368, the foreign equivalent to the instant U.S. application 10/078474.	
1	1	AKIYAMA, M., et al., "Growth of high quality GaAs layers on SI substrates by MOCVD:, erticle, Journal of Crystal Growth, Vol 77, 1986, pgs 490-7.	Γ
	/	BOUCART J et al. "Metamorphic DBR and Tunnel-Junction Injection: A CW RT Monolithic Long-Wavelength VCSEL" IEEE Journal of Selected Topics in Quantum Electronics, IEEE Service Center, US, vol. 5 no. 3 May 1999 pages 520- 528	
'		BOUCART, J., et et., "Optimization of the metamorphic growth of GaAs for long wavelength VCSELs", article, Journal of Crystal Growth, 201-202, 1999, pgs 1015-9.	Γ
	1	DEMEESTER, P. et al., "GaAs on InP: a promising material combination", article, Chemtronics, Vol 4, Mar 1989, pgs 44-a.	T
	٦	GEBRETSADIK H et al. "Growth of High-Quality GAAS/ALAS Bragg Mirrors on Patterned Inp-Based Quantum Well Mesa Structures" Applied Physics Letters, American Institute of Physics. New York, US, vol. 71, no. 5, August 4, 1997 pages 581-583	
	7	GOLDSTEIN L. et al. "Metamorphic GAAS/ALAS Bragg Mirrors Deposited on INP For 1,3/1,55 Mum Vertical Cavity Lasers" Digest IEEE / LEOS Summer Topical Meetings, XX, XX, August 11, 1997 pages 49-50	Γ
	1	GOLDSTEIN, L., et al., "GaAlAs/GaAs metamorphic Bragg milror for long wavelength VCSELs", article, Electronics Letters, Vol 34, No 3, Feb 5, 1998, pgs 268-70.	Γ
	1	SHIMOMURA, H., et al., "High-reflectance AIPSb/GaPSb distributed Bragg reflector mirrors on InP grown by gas-source molecular beam epitaxy", article, Electronics Latters, Vol 30, No 4, Feb 17, 1994, pgs 314-5.	Γ
)	STARCK, C., "Fabrication of 1.55 µm coddized VCSELs with top metamorphic GaAs/GaAlAs and bottom int/finGaAsP Bragg reflectors", article, IEEE 10 th international Conference on Indium Phosphide and Related Materials, Tsukuba, Japan, May 11-5, 1998, pgs 369-72.	
DW		YUEN W. st at. "High-Performance 1.6 Micrometers Single-Epitary Top-Emitting VCSEL" Electronics Letters, IEE Stevenaga, GB, vol. 38, no. 13, June 22, 2000 whole document.	
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